

Date: Tuesday, 23/12/2008 9:46:52 AM
 User: Julie Dawson

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : 206B AFT X-TUBE
Job Number : 44271	
Estimate Number : 13221	
P.O. Number :	Part Number : D206667201TRN
This Issue : 23/12/2008 S.O. No. :	Drawing Number : D206-667-241 REV B
Prsht Rev. : NC	Project Number : N/A
First Issue : 1/1 Type : CROSSTUBES	Drawing Revision : <i>EC</i>
Previous Run : 44270	Material :
Written By :	Due Date : 05/01/2009 Qty: 1 Um: Each
Checked & Approved By : <i>JD 08.12.23</i>	
Comment : Est Rev:A 08-03-06 new issue DD verified by:ec Est Rev B 08.04.02 Removed polish EC verified by:DD	

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	D6003102	Crosstube, 206
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Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part number Description Batch

1 D6003-102 Crosstube *B29116*

Check OD = 2.250"; ID = 1.380"

20.01.08

Q.M 09.01.08 ①

2.0	MORI SEIKI	MORI SEIKI CNC LATHE LARGE
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**Comment:** MORI SEIKI CNC LATHE LARGE

1-Fill tube with sand & install plugs DT8534 on both ends as per Folio FA084

2-Turn first side as per Folio FA084

3-File down transition lines smooth.

Q.M 09.01.08 ①

3.0	QC1	INSPECT ALL DIM TO DIM SHEET
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**Comment:** INSPECT ALL DIM TO DIM SHEET

Q.M 09.01.08 ①

4.0	MORI SEIKI	MORI SEIKI CNC LATHE LARGE
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**Comment:** MORI SEIKI CNC LATHE LARGE

1-Turn second side as per Folio FA084

2-File down transition lines smooth.

3-Remove sand and plugs

Q.M 09.01.08 ①

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Drawing Name: 206B AFT X-TUBE

Job Number: 44271

Part Number: D206667201TRN

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

QC1

INSPECT ALL DIM TO DIM SHEET



Comment: INSPECT ALL DIM TO DIM SHEET

a.m 09.01.08 ①

6.0

QC8

SECOND CHECK



Comment: SECOND CHECK

AWM 9-01-12

①

7.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

pmc 09-01-12

8.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

a.m 09.01.14 ①

9.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock in kanban rack

Location: 26

a.m 09.01.14 ①

10.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

09/01/15

Job Completion



JLD 09/01/14 ①

DART AEROSPACE LTD		Work Order: 44271	
Description: Crosstube Assembly		Part Number:	D206-667-241
Inspection Dwg: D206-667-241 Rev: B		Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Inspection Sheet Drawing Dimension		Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
SIDE A	30° x 0.500	+/-0.010	30° x 0.500	✓			
	0.250	+/-0.010	0.250	✓			
	2.240	+0.005/-0.000	2.245	✓			
	4.438	+/-0.030	4.438	✓			
	1.780	+0.005/-0.000	1.785	✓			
	R0.063	+/-0.010	R0.063	✓			
	1.851	+0.005/-0.000	1.856	✓			
	1.928	+0.005/-0.000	1.933	✓			
	2.005	+0.005/-0.000	2.008	✓			
	2.082	+0.005/-0.000	2.082	✓			
	2.159	+0.005/-0.000	2.163	✓			
	2.190	+0.005/-0.000	2.194	✓			
SIDE B	30° x 0.500	+/-0.010	30° x 0.500	✓			
	0.250	+/-0.010	0.250	✓			
	2.240	+0.005/-0.000	2.245	✓			
	4.438	+/-0.030	4.438	✓			
	1.780	+0.005/-0.000	1.785	✓			
	R0.063	+/-0.010	R0.063	✓			
	1.851	+0.005/-0.000	1.856	✓			
	1.928	+0.005/-0.000	1.933	✓			
	2.005	+0.005/-0.000	2.008	✓			
	2.082	+0.005/-0.000	2.082	✓			
	2.159	+0.005/-0.000	2.163	✓			
	2.190	+0.005/-0.000	2.194	✓			
100.60		+/-0.020	100.600	✓			

Measured by: Q.m	Audited by: AWM	Prototype Approval:	N/A
Date: 09.01.08	Date: 9-1-12	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	06.10.16	New Issue (P/O D206-667-201)	KJ/JLM	B

Item	Qty -241	Part Number	Description
1	X	D206-667-241	CROSSTUBE ASSEMBLY (206B HIGH AFT)
2	1	D6003-102	CROSSTUBE
3	2	D2891-1	SUPPORT
4	4	D3595-063-395	RUBBER CUSHION
5	4	MS21920-20	CLAMP (OR MS21920-21)
6	A/R	MAGNOBOND 6398	ROCKWELL SPECIFICATION RBO-120-023 ADHESIVE (TEXTRON/BELL SPEC. 299-947-100, TYPE II, CLASS 2 ADHESIVE)

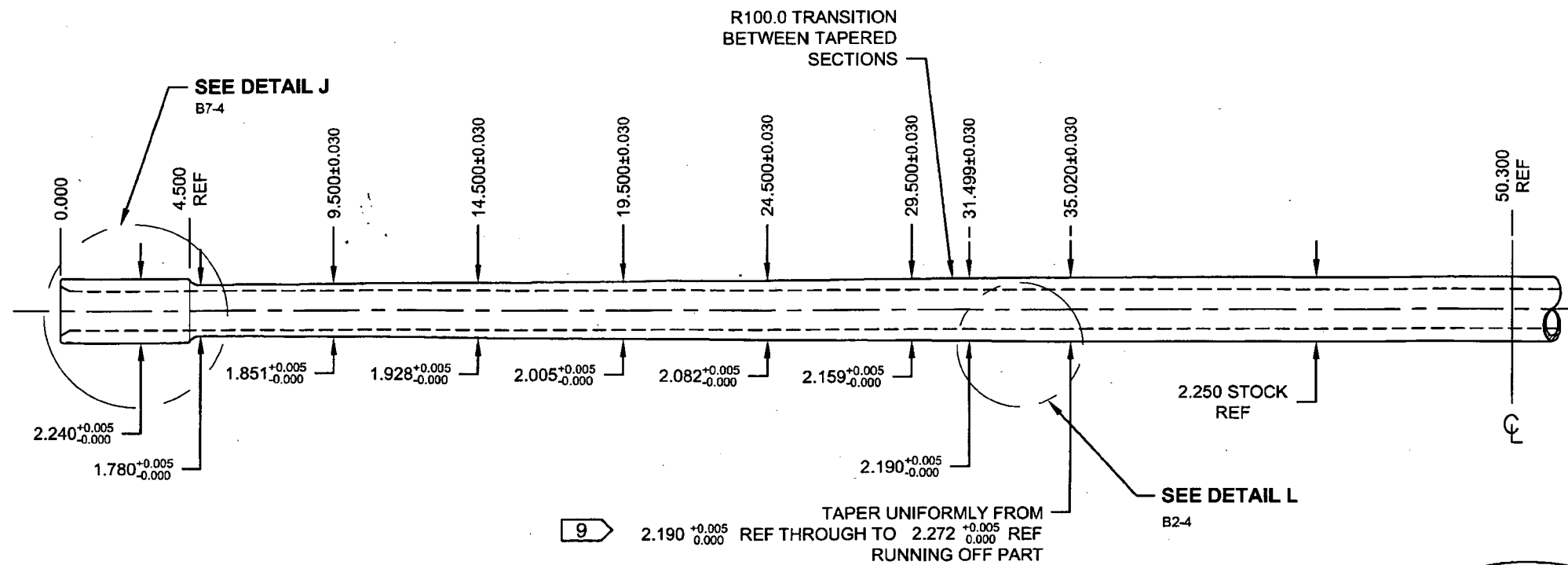
GENERAL NOTES:

- 1) MATERIAL: MANUFACTURED FROM D6003-102
FINISHED LENGTH = 100.60±0.020
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
PRIME INSIDE AND OUTSIDE PER DART QSI 005 4.2
PAINT OUTSIDE PER DART QSI 005 4.2
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED.
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX.
- 6) IDENTIFICATION: SCRIBE DART PART NUMBER "D206-667-241" AND BATCH NUMBER ON INSIDE OF CUFF USING VIBRATING STYLUS.
- 7) WEIGHT: 22.5 lbs
- 8) PART IS SYMMETRIC ABOUT CENTERLINE.
- 9) RUN CUTTER OFF PART WHERE INDICATED. BLEND OUT EDGE LONGITUDINALLY, TRANSITION SHOULD BE SMOOTH.
- 10) BEND PROGRESSIVELY WITH A MINIMUM OF 12 PASSES. MAXIMUM TUBE FLATTENING DUE TO BENDING IS 6% BASED ON O.D.
- 11) LIQUID PENETRANT INSPECT OUTSIDE SURFACE OF CROSSTUBE PER QSI 038.
- 12) INSTALL D2891-1 SUPPORT USING 0.03" TO 0.06" THICK LAYER OF MAGNOBOND 6398 PER QSI 015. LET CURE FOR 12 HOURS AFTER INSTALLATION AND PRIOR TO PACKAGING.
- 13) INSTALL MS21920-20 CLAMPS (OR -21) WITH D3595-063-395 RUBBER CUSHIONS TO SECURE THE D2891-1 SUPPORT ON TOP SIDE OF THE CROSSTUBE. ENSURE CLAMPS MECHANISMS ARE LOCATED ON CROSSTUBE CLAMPS.
- 14) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR DENTS. DEFECTS UP TO 0.005" MAY BE BLENDED OUT LONGITUDINALLY. CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE.
- 15) TORQUE CLAMPS 80 TO 100 IN-LB. ENSURE AT LEAST 1.5 THREADS ARE SHOWING IN SAFETY AND THAT NUT HAS NOT BOTTOMED-OUT AFTER TORQUING.

RELEASED
08/11/12

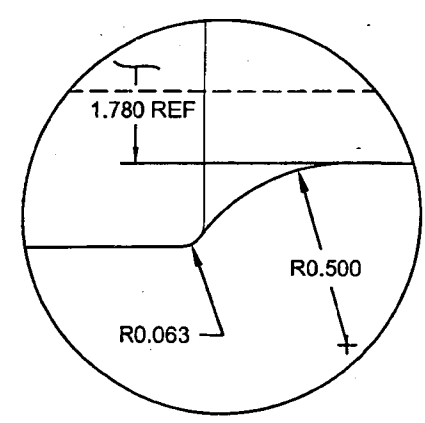
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C	REFORMAT/REVISE GENERAL NOTES/PART LIST (ZN D7-1); REORGANIZED VIEWS AND REFORMATTED DRAWING TO CURRENT STANDARDS. D3595-063-395 WAS D2856-400-694 (ZN D6-2 & A5-2); REMOVED REF. & ADD TOLERANCES (ZN C5-3, C4-3, D3-3); RELOCATED FLAG #6 (ZN A7-3) PER NCR 210; MOVED TURNING DETAIL & UPDATED TOLERANCE TO SHEET 4.	RF	08.11.06
B	ADD HOLES FOR COMPATABILITY WITH BHT/AA SKIDTUBES	PH	05.02.04
A	NEW ISSUE	CP	00.11.17
REV.	DESCRIPTION	BY	DATE
DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF	DRAWING NO. REV. C D206-667-241 SHEET 1 OF 4	
CHECKED	RF	TITLE SCALE CROSSTUBE ASS'Y (206B HIGH AFT) NTS	
MFG. APPR.	RF	COPYRIGHT © 2000 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	
APPROVED	RF	DATE 08.11.06	
DE APPR.	RF		

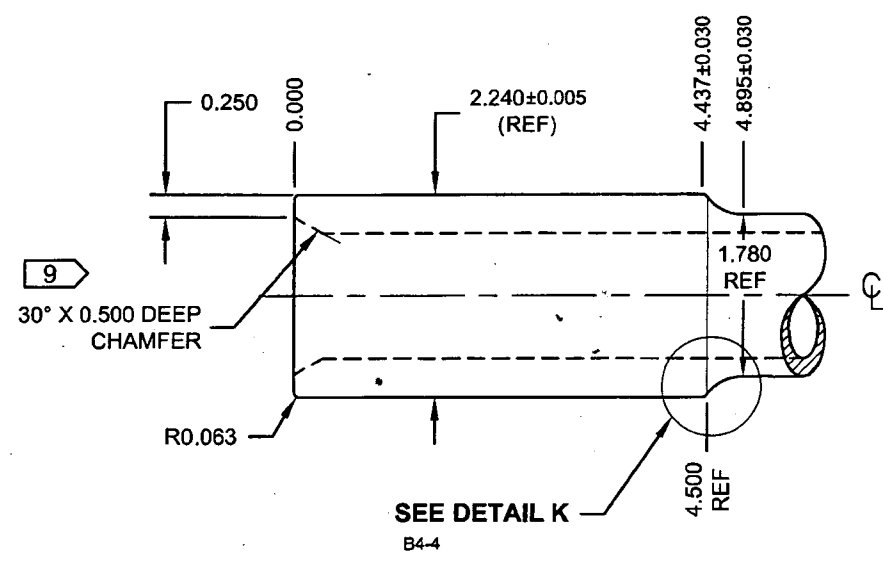


9 2.190 ± 0.005 REF THROUGH TO 2.272 ± 0.005 REF RUNNING OFF PART

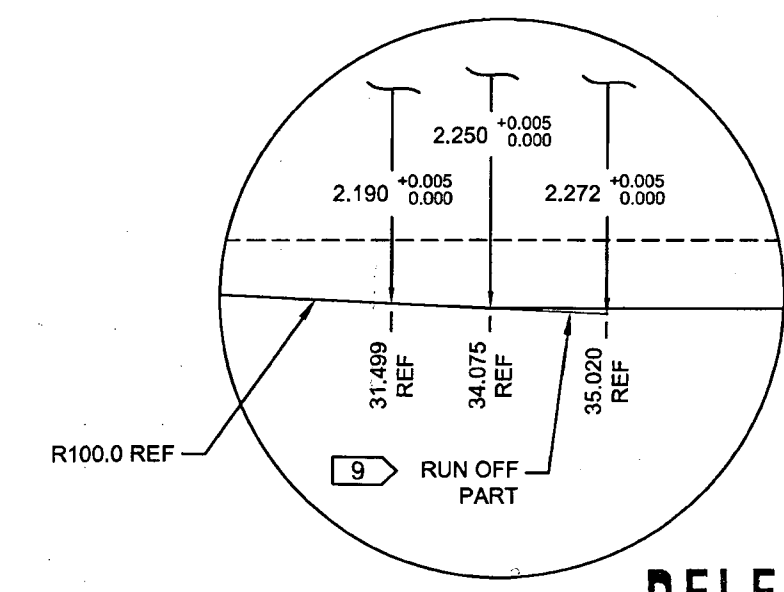
TURNING DETAIL



DETAIL K: CUFF TRANSITION
NOT TO SCALE



DETAIL J: CROSSTUBE CUFF
NOT TO SCALE



DETAIL L: TAPER RUN-OFF
NOT TO SCALE

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MFG. APPR.	GP	D206-667-241	SHEET 4 OF 4
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8 7 6 5 4 3 2 1

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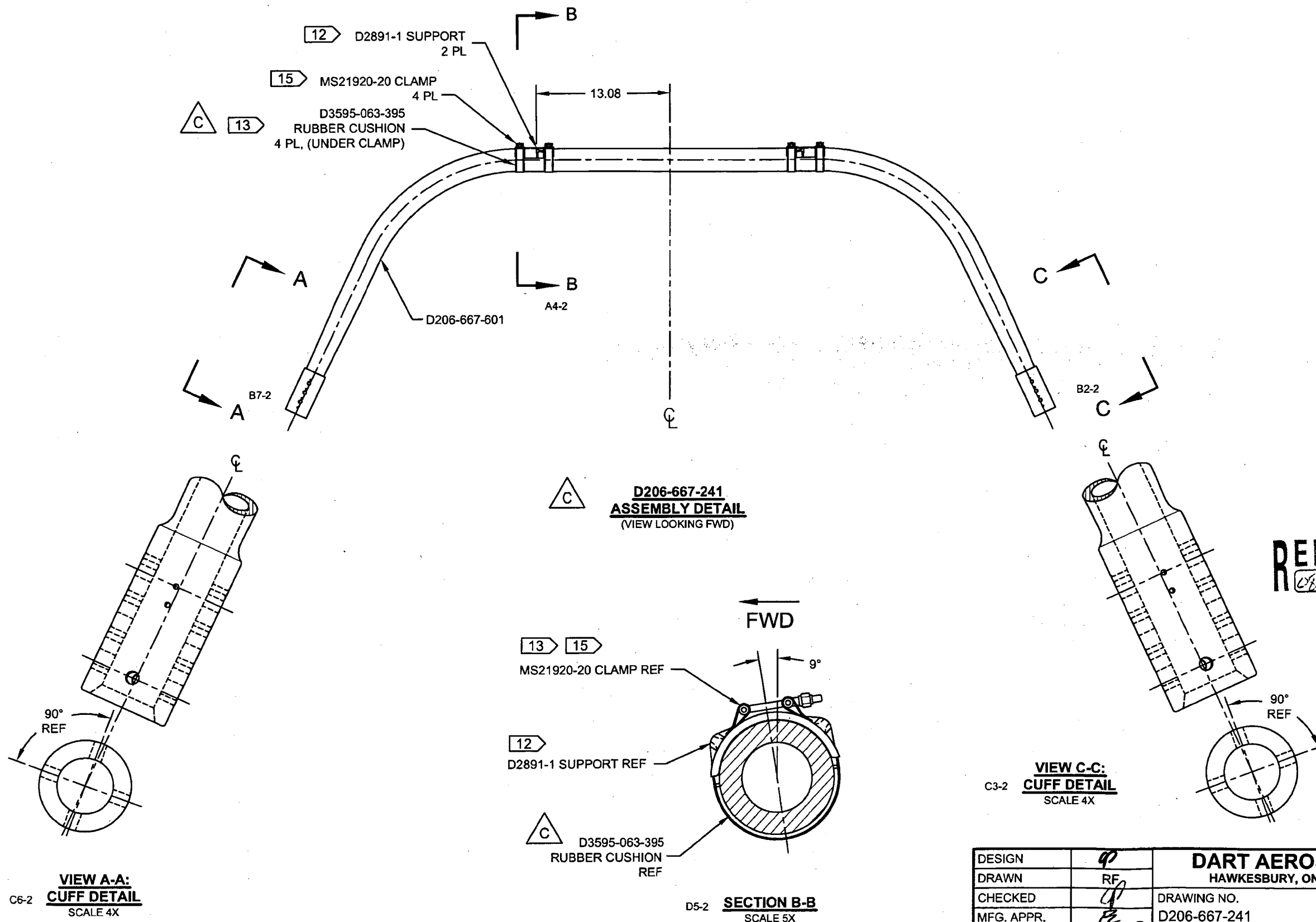
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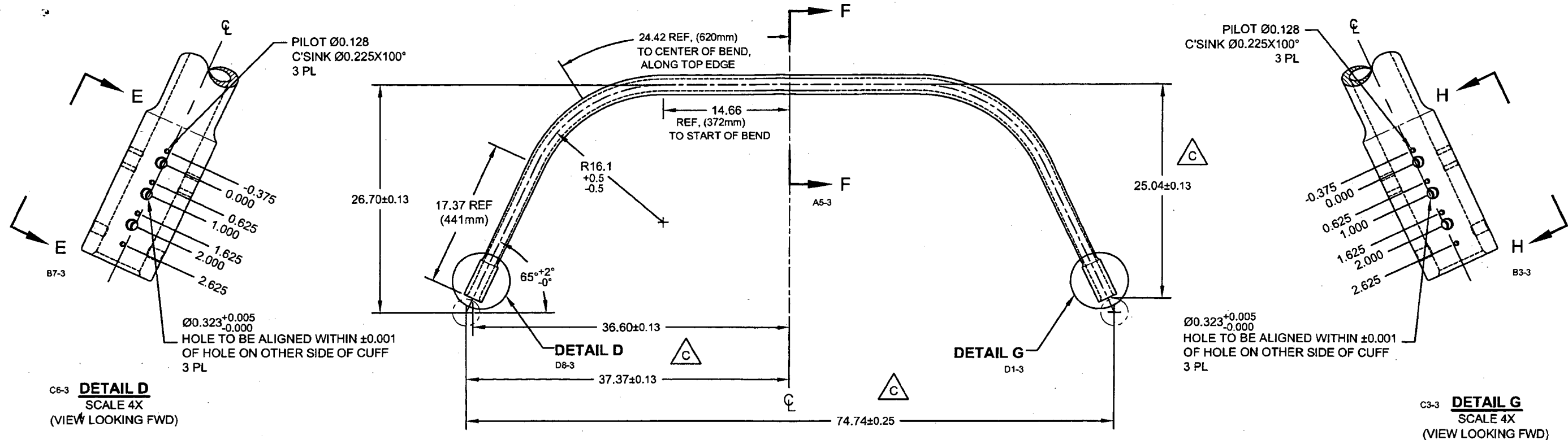


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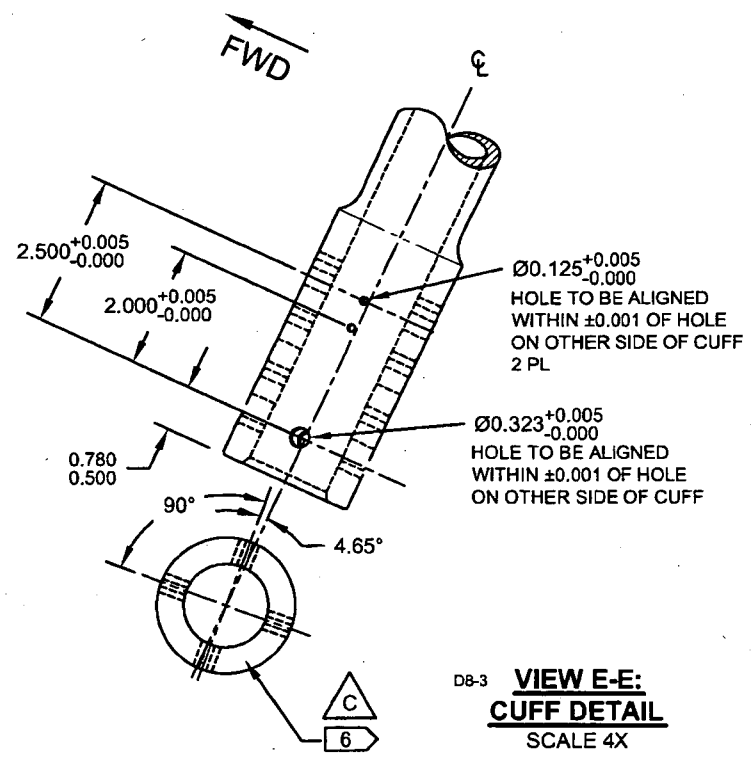
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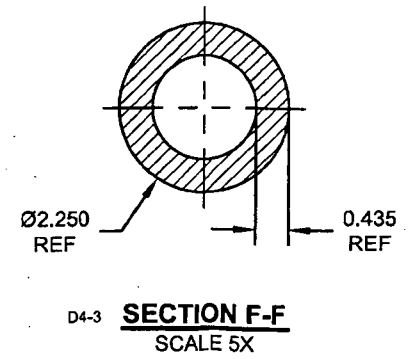
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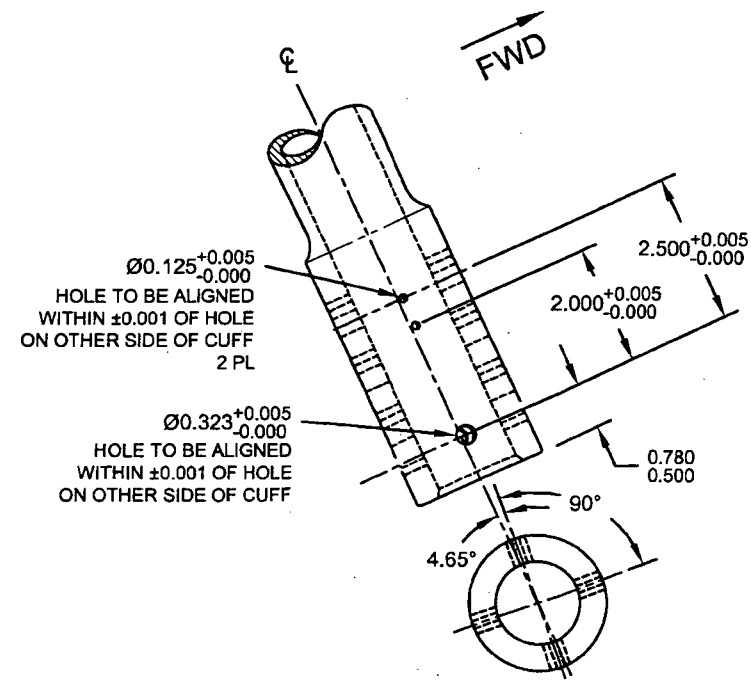
D206-667-601
BENDING AND DRILLING DETAIL
 (VIEW LOOKING FWD)



VIEW E-E:
CUFF DETAIL
 SCALE 4X



SECTION F-F
 SCALE 5X



VIEW H-H:
CUFF DETAIL
 SCALE 4X

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MFG. APPR.	EF	D206-667-241	SHEET 3 OF 4
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